DOCUMENT RESUME

ED 381 601 UD 030 361

AUTHOR	Petro, Janice Rose; And Others
TITLE	The Chapter 1 Challenge: Colorado's Contribution 1993.
INSTITUTION	Colorado State Dept. of Education, Denver.
PUB DATE	Oct 94
NOTE	29p.
PUB TYPE	Reports - Descriptive (141) -- Statistical Data (110)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Academic Achievement; *Achievement Gains; *Compensatory Education; *Disadvantaged Youth; *Educational Finance; Elementary Secondary Education; Enrollment; Ethnic Groups; *Federal Aid; Low Income Groups; Minority Groups; Remedial Programs; Urban Schools
IDENTIFIERS	*Colorado; *Education Consolidation Improvement Act Chapter 1

ABSTRACT

An overview is provided of Colorado's participation in Chapter 1, the largest federally funded program designed to provide services to elementary and secondary students. Chapter 1 provides financial assistance to state and local education agencies to meet the special needs of educationally deprived children who reside in areas with high concentrations of children from low-income families. In fiscal year 1993, Colorado Chapter 1 programs were administered by 100 districts and 8 Boards of Cooperative Educational Services. Staff members totalling 1,494.91 full-time equivalents served a total of 40,404 students in Chapter 1, with additional students served in a state-administered institution for neglected or delinquent children. Chapter 1 participants were concentrated in the early elementary grades. Fifty-five percent of participants belonged to an ethnic minority, representing a larger share than they did in the general student population. Also discussed are services, the measurement of achievement, and gains. Colorado consistently has higher average normal curve equivalent gain scores in reading, language arts, and mathematics in both basic and advanced skills than national averages for Chapter 1 students. Some successful projects are highlighted. (SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

UD

ED 381 601

THE CHAPTER 1 CHALLENGE:

COLORADO'S CONTRIBUTION 1993

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

N. Bolt
Colorado Dept of Ed.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

UD 030 61

cde
Colorado Department of Education
201 E. Colfax, Denver, CO 80203
October, 1994

BEST COPY AVAILABLE

THE CHAPTER 1 CHALLENGE:
COLORADO'S CONTRIBUTION 1993

Prepared By:
Janice Rose Petro, Research Analyst
Research and Evaluation Unit
Colorado Department of Education
(303) 866-6838

In Cooperation With:

Judith C. Burnes, Executive Director
Research and Evaluation Unit

Virginia R. L. Plunkett, State Director
Chapter 1 Program

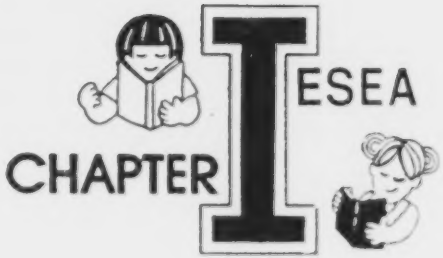
Karen Stroup, Chief of Staff
Office of Management, Budget and Planning

Betty R. Hinkle, Executive Director
Office of Federal and State Program Services

William T. Randall
Commissioner of Education
State of Colorado

WHAT IS CHAPTER 1?

Chapter 1 of the Elementary and Secondary Education Act (ESEA) is the largest federally-funded program designed to provide services to elementary and secondary students. The legislation authorizes services above and beyond those provided by a regular school program. Initially enacted as Title I of the Elementary and Secondary Education Act of 1965, Chapter 1 provides "...financial assistance to state and local educational agencies to meet the special educational needs of educationally deprived children..." who reside in areas with high concentrations of children from low income families. Chapter 1 funds are allocated to districts on the basis of a formula that includes the number of children from low income families residing in that area. Within a district, however, services are provided to students on the basis of educational need rather than family income.



All Chapter 1 programs must meet the following federal requirements:

Needs assessment

All Chapter 1 programs must conduct a needs assessment each year and provide services to students who are identified as having the greatest educational needs.

Supplementary services

Chapter 1 services are intended to be supplementary to the regular educational program and may not take the place of services provided by the district or state.

Concentration of services

The law requires that Chapter 1 programs be of sufficient size, scope and quality to "give reasonable promise of substantial progress toward meeting the special educational needs of the children being served" within the scope of available resources.

Instructional services

Chapter 1 is primarily an instructional program but a limited amount of essential support services may be provided with available Chapter 1 funds.

Parental involvement

Programs must be designed and implemented in consultation with parents.

Evaluation

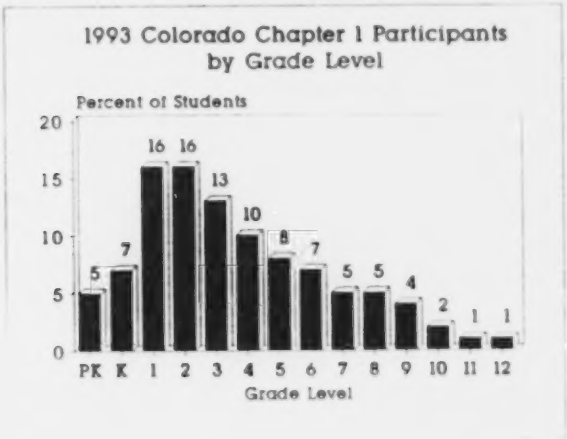
All Chapter 1 programs must be evaluated and the results must be used for program improvement. Results of local evaluations are summarized and reported at the state and national levels.

WHO IN COLORADO PROVIDES CHAPTER 1 SERVICES?

In FY 1993, Colorado Chapter 1 programs were administered by 100 districts and eight Boards of Cooperative Educational Services (BOCES), representing an additional 74 districts. Staff members totalling 1,494.91 full-time equivalents (FTEs) served a total of 40,404 students in Chapter 1. A state-administered institution for neglected or delinquent children also provided services to 411 students. Administrative and technical assistance services were supplied by the Colorado Department of Education, and additional evaluation assistance was furnished by the Technical Assistance Centers of RMC Research Corporation. The Centers are located in Denver and are funded by the federal government to provide assistance in evaluation and program improvement to state and local Chapter 1 programs.

WHO DOES CHAPTER 1 SERVE?

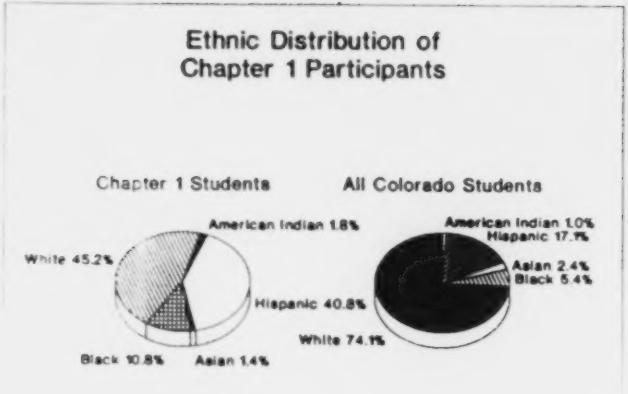
There were 40,404 students in Colorado who received Chapter 1 services in FY 1993. The number of participants in Chapter 1 programs increased by 4.8 percent from FY 1992.



Colorado Chapter 1 participants continued to be concentrated in the early elementary grades, with the next highest concentration in grades 4-6. The number of participants in prekindergarten and kindergarten has increased from 3,300 in 1987 to 4,750 in 1993, a 44 percent increase.

Colorado Chapter 1 services were targeted to students with substantial educational needs. The average pretest Normal Curve Equivalents (NCEs) in basic reading, language arts and math were 27.3, 30.5, and 28.3 respectively. The corresponding average pretest percentiles were 14, 18 and 15. In advanced reading, language arts and math average pretest NCEs were 27.4, 30.7 and 30.7; corresponding percentiles were 14, 18 and 18.

Fifty-five (54.8) percent of Chapter 1 participants belong to an ethnic minority. During FY 1993, 74.1 percent of all Colorado public school students were white. Students from ethnic groups represented a larger share of Chapter 1 participants than they did in the general student population. The percentages of American Indian, Black and Hispanic were nearly twice what is found in the general student population.



When examined by gender, 55.7 percent of the Chapter 1 participants were male and 44.3 percent were female. State percentages were 51.4 and 48.6, respectively.

Chapter 1 Participants in the Division of Youth Services

Age	Number of Delinquent
10-13	8
14-16	186
17-20	216
Over 20	1
Total	411

Division of Youth Services

Chapter 1 services were also provided to students in a state institution for the neglected or delinquent. There, Chapter 1 services focused primarily on students in the 14- to 20-year-old age range.

Nonpublic School Students

Colorado nonpublic school students also participated in the Chapter 1 program. These 612 students accounted for only 1.5 percent of all Chapter 1 participants. In comparison, 6.2 percent of all Colorado students attended private schools during the 1992-93 school year.

WHAT ARE OTHER ASPECTS OF CHAPTER 1?

Funding

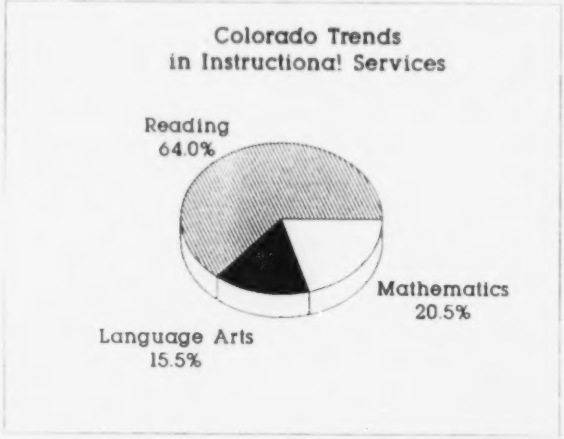
Fiscal Year (FY) 1993 Chapter 1 funding was $48,859,825, a 10.2 percent increase in Chapter 1 funds from FY 1992. This amount represents funds for use in Local Education Agencies (LEAs) only.

Average spending per student was $1,209. Chapter 1 dollars per child increased 5.1 percent from the previous year.

Services

The majority of 1992-93 Chapter 1 participants received instruction in reading. However, compared to last year, a greater percentage of students received instruction in math, and a lesser percentage of students received reading and language arts instruction.

Guidance, social work, transportation and health/nutrition were areas in which support services were provided. Relatively few participants, only 2.6 percent of all Chapter 1 students, received such non-instructional support.



Staff

Number of Chapter 1 Staff by Category

Category	Number in FTE
Teachers	870.78
Aides	517.03
Administrators	32.72
Other	74.38
Total	1,494.91

There were 1,494.91 full-time equivalent staff members (FTEs) funded by Chapter 1 in Colorado in FY 1993. More people served in each category except administrators than in FY 1992. This 3.3 percent increase in staff accompanied a 4.8 percent increase in Chapter 1 student participation. The "other" category represents curriculum specialists, support staff and clerical staff.

Parent Involvement

Chapter 1 parents were involved in a variety of activities around the educational program and services for their children in 1993. A total of 43,441 parents participated in general Chapter 1 project planning, implementation and/or evaluation. A large number of parents, 37,622, attended parent-teacher conferences to discuss achievement, concerns and progress of their children. In addition, 28,974 parents were reported as having attended Chapter 1 workshops, conferences or meetings during the 1992-93 school year. Parent involvement increased an average of 29 percent in these three categories over the previous year.

Program Improvement

School and LEA Program Improvement

	Schools	LEAs
Total in State	1,369	176
Total in Chapter 1	569	108*
Not Meeting Goals		
Number	163	51
Percentage	28.6%	46.7%
Identified for Program Improvement		
Number	110	71**
Percentage	19.3%	65.7%

* Each BOCES is counted as an LEA. However, the eight BOCES represent 74 districts.
** Includes individual districts within BOCES.

The 1988 reauthorization of Chapter 1 emphasized accountability and program effectiveness. Additional funds were made available to those schools identified for program improvement. Projects which did not make at least two NCEs gain as measured by norm-referenced tests or their stated Normal Curve Equivalent (NCE) achievement goal in basic or advanced skills were initially identified. There were exceptions by which schools could be excused from the program improvement process, such as serving less than 10 students in a project or having an extremely mobile population. Nineteen (19.3) percent of all Chapter 1 schools in Colorado and 65.7 percent of all Chapter 1 LEAs were identified in 1993 to conduct program improvement activities in at least one subject area.

HOW IS ACHIEVEMENT MEASURED?

Achievement gains resulting from Chapter 1 services are reported by all Colorado Chapter 1 districts each year using a Normal Curve Equivalent (NCE) scale, in which scores range from 1 to 99. NCE scores allow results of different tests to be combined on a common scale. Without the benefit of supplementary services such as provided by Chapter 1, a student is expected to have zero NCE growth during the year or to stay at the same percentile rank. Any increase in percentile rank or any NCE growth greater than zero is assumed to be the result of the extra services provided and represents more than a year's gain in achievement.

The following summary of Colorado Chapter 1 achievement gains is based on students who were tested on an annual cycle. An annual testing schedule may consist of fall pretest and posttest dates or a spring pretest followed by a spring posttest the following year.

Chapter 1 programs are required by legislation to report both basic and advanced skills. Testing of advanced skills was added to determine student progress in higher order thinking skills. Advanced skills subtests have been defined as Reading Comprehension in reading and Problem Solving or Applications in mathematics. If a language arts subtest is used to test basic skills, advanced skills reporting is not required.

Achievement is also measured by means other than standardized tests. Chapter 1 student success in the regular school program is measured by the number of Chapter 1 students who are promoted to the next grade level the following school year and grades received in similar subject area classes.

WHAT WERE THE RESULTS?

1993 Achievement Results: Average NCE Gains

	Annual Testing Cycle			
	Basic Skills		Advanced Skills	
Subject	N	NCE	N	NCE
Reading	11,485	5.4	11,441	5.7
Language Arts	2,280	4.4	1,542	3.9
Math	4,047	6.0	3,992	5.2

N = Number of students tested in each testing cycle.

NCE = Average weighted NCE gain.

Chapter 1 reading, language arts and math programs across Colorado were effective in improving the achievement level of participants. Average NCE gains across all grades were positive in all subjects. Colorado Chapter 1 students increased their basic reading, language arts and math scores from the 14th to the 21st, 18th to 24th and 15th to the 23rd percentiles, and their advanced scores from the 14th to 21st, 18th to 23rd and 18th to 25th percentiles, respectively.

More detailed results are presented in the following tables in which achievement gains are reported by skill level and grade.

Required by federal legislation, the annual testing cycle represents gains obtained during the full program year. Annual testing cycles have a student transiency factor which must be considered when interpreting Chapter 1 gain scores. In many districts, student mobility in and out of the district is high. Within these districts, only a portion of the students who took the pretest were still around to take the posttest one year later. Thus, gain scores from these districts represent only a fraction of the pretested Chapter 1 participants. During the 1992-93 program, annual cycle test results were not reported for 43 percent of the Chapter 1 students in membership due to student mobility.

Test scores for small student samples should be interpreted with caution. Aggregate scores for small groups are likely to be affected by the extreme scores of one or two students.

Other indicators of Chapter 1 student success in the regular classroom are a low percentage of retentions and grades. Only 1.3 percent, or 508, 1992-93 Chapter 1 students were retained in the 1993-94 school year. Grades in similar subject area classes were encouraging. In reading or language arts 78.6 percent of students graded within the A-F system had C's or higher and 69.6 percent had satisfactory grades within the SNU (Satisfactory-Needs Improvement-Unsatisfactory) scale. In mathematics, 75.3 percent had C's or higher and 75.6 percent received satisfactory marks.

Colorado 1993 Chapter 1 Achievement Gains
Basic Skills by Grade

	Reading		Language Arts		Mathematics	
Grade	N	NCE	N	NCE	N	NCE
2	2,447	4.82	504	3.67	483	8.29
3	2,238	7.42	490	5.93	642	5.23
4	1,651	6.15	342	1.41	697	6.98
5	1,342	4.77	307	4.71	620	6.34
6	1,424	3.87	238	8.13	575	4.39
7	1,041	5.88	126	.75	334	6.37
8	802	3.90	113	5.93	319	4.63
9	260	4.67	58	4.62	195	6.31
10	149	1.77	41	2.99	118	3.09
11	88	2.34	45	2.41	54	8.62
12	43	9.21	16	2.37	10	9.93
	11,485	5.38	2,280	4.35	4,047	6.04

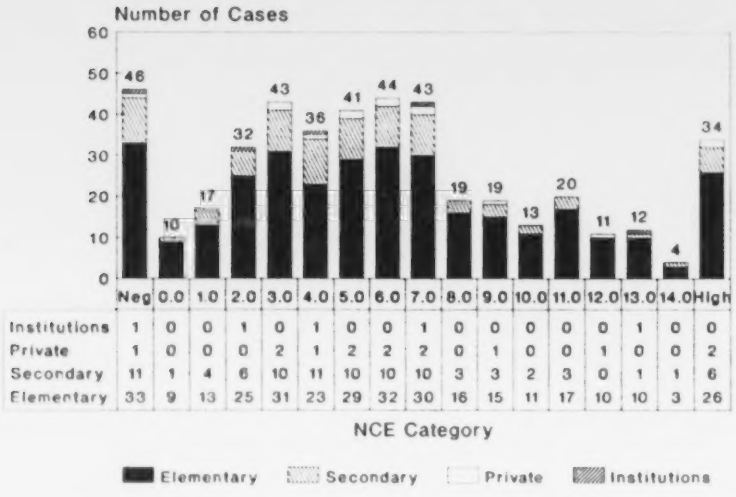
N = Number of students tested at each grade level.
NCE = Average weighted NCE gain.

Colorado 1993 Chapter 1 Achievement Gains
Advanced Skills by Grade

	Reading		Language Arts		Mathematics	
Grade	N	NCE	N	NCE	N	NCE
2	2,427	5.32	327	1.82	433	5.82
3	2,251	8.28	321	5.57	633	5.09
4	1,656	6.13	227	1.50	698	5.47
5	1,335	4.29	222	4.25	616	6.03
6	1,422	3.83	166	7.17	575	3.42
7	1,041	6.23	75	3.23	337	6.13
8	769	5.20	59	5.88	319	4.82
9	260	5.07	57	4.63	198	5.95
10	149	2.11	32	4.62	117	3.08
11	88	2.70	40	3.11	55	8.72
12	43	9.22	16	2.93	11	7.49
	11,441	5.73	1,542	3.91	3,992	5.24

N = Number of students tested at each grade level.
NCE = Average weighted NCE gain.

Number of Schools in NCE Ranges
Colorado 1993 Chapter 1 Advanced Reading

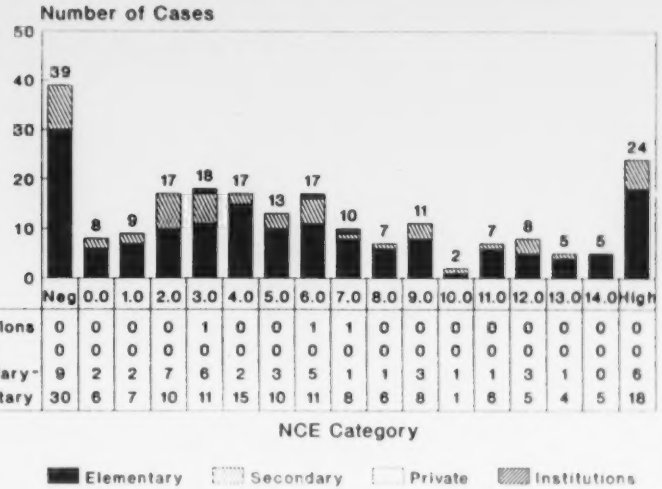


	Neg	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	High
Institutions	1	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0
Private	1	0	0	0	2	1	2	2	2	0	1	0	0	1	0	0	2
Secondary	11	1	4	6	10	11	10	10	10	3	3	2	3	0	1	1	6
Elementary	33	9	13	25	31	23	29	32	30	16	15	11	17	10	10	3	26

This graph includes 444 total cases.

The majority of Colorado Chapter 1 schools with reading programs scored well above the state minimum of 2.0 NCEs in advanced skills. Eighty-three percent of elementary schools and secondary schools had average NCE gains of 2.0 or above. Basic skill percentages were higher (85 percent) for the elementary level and the same (83 percent) for secondary schools.

Number of Schools in NCE Ranges
Colorado 1993 Chapter 1 Advanced Math



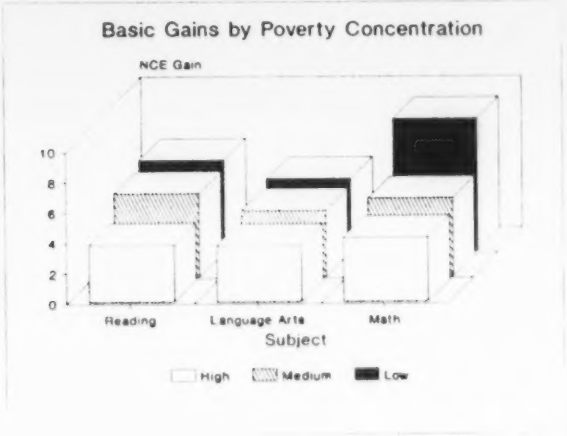
This graph includes 217 total cases.

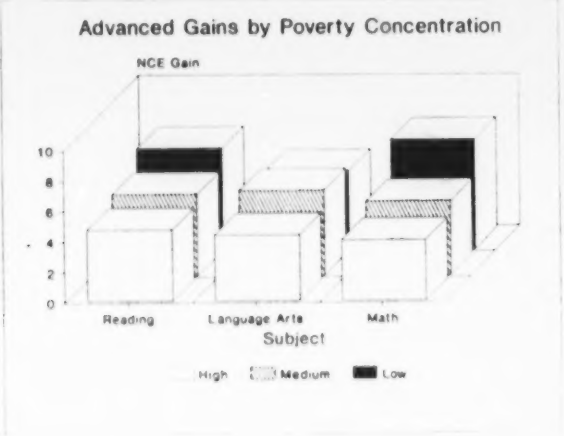
Most NCE scores in advanced mathematics were above the Colorado Chapter 1 state minimum as well. Seventy-three percent of elementary schools and 75 percent of secondary schools scored 2.0 NCEs or above. The percentages for both levels were higher (77 and 78 percent, respectively) for basic skills.

WHERE WERE THE RESULTS GREATEST?

Poverty Level

Chapter 1 schools with high concentrations of poverty have lower average NCE gains in both basic and advanced skills than those with medium or low poverty. The level of poverty was determined by the percentage of students on free lunch within a school: High, 67-100 percent; Medium, 34-66 percent; and Low, 0-33 percent.





Project Setting

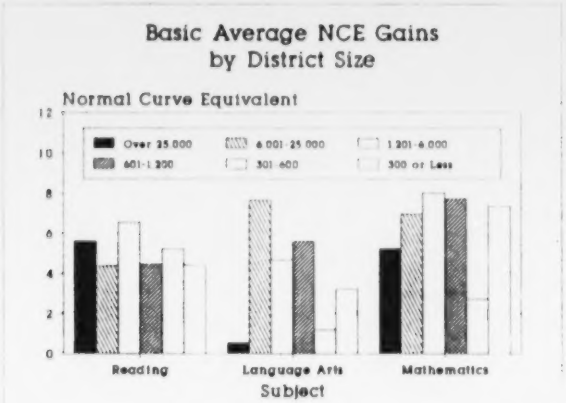
The most popular educational setting for Chapter 1 instruction is pullout in which teachers conduct Chapter 1 lessons in a designated room other than the regular classroom. In reading 65 percent of tested students were in, and 59 percent of LEAs conducted, pullout programs. In language arts the percentages were 50 and 46 respectively and in math they were 46 and 59. There was no clear relationship between project setting and NCE gains.

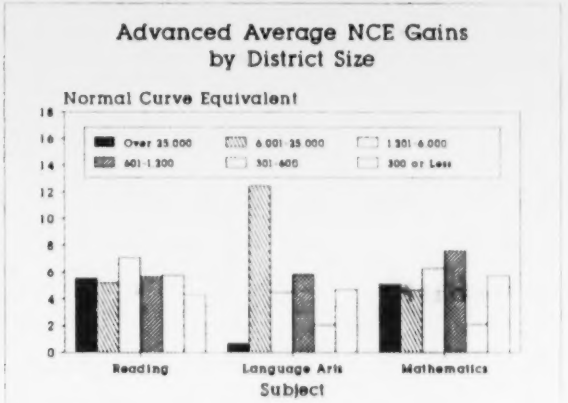
LEAs by Project Setting

	Reading		Language Arts		Mathematics	
	Number	Percentage	Number	Percentage	Number	Percentage
In-Class	15	13%	4	11%	5	7%
Pullout	68	59	16	46	41	59
Computer Lab	3	3	1	3	1	2
Elective	5	4	7	20	2	3
In-Class and Pullout	15	13	6	17	10	15
In-Class and Computer Lab	1	1	0	0	0	0
Pullout and Computer Lab	6	5	1	3	7	10
Other	3	3	0	0	3	4

District Size

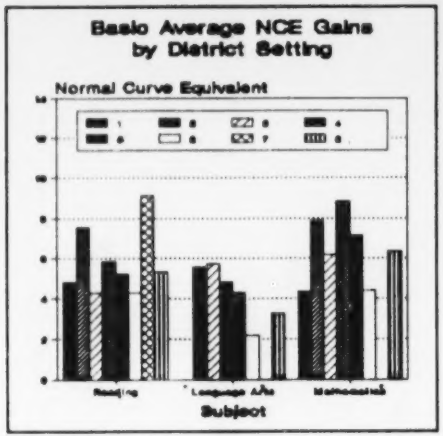
Test scores varied across district size categories. Districts with enrollments between 1,201 and 6,000 showed the highest average NCE gains in reading and those with enrollments between 6,001 and 25,000 had the highest language arts gains. The highest gains in math basic skills were obtained by districts with enrollments between 1,201 and 6,000 and in advanced skills with enrollments between 601 and 1,201

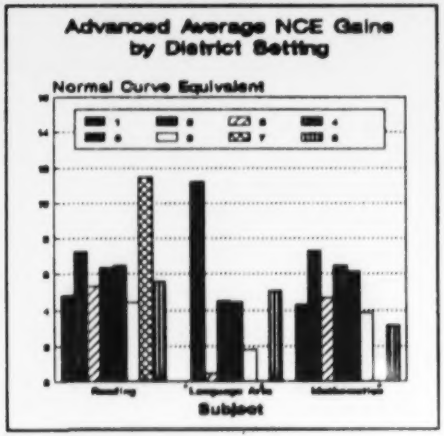




District Setting

Recreational districts scored the highest average basic and advanced skills NCE gains in reading. Urban-suburban districts had the highest average basic skills scores in language arts and Denver metro districts had the highest advanced language arts scores. In math, Colorado outlying cities posted the highest scores in basic skills and Denver metro districts scored highest in advanced math.





Setting Categories

1 Core City

2 Denver Metro

3 Urban-Suburban

4 Outlying City

5 Outlying Town

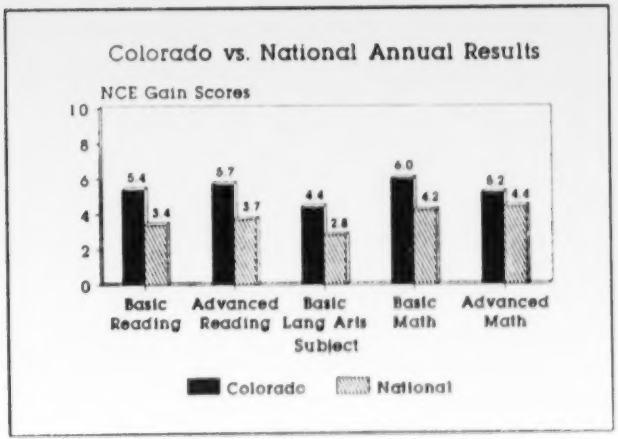
6 Rural

7 Recreational

8 Small Attendance

* Districts in these settings don't have any projects in the designated subject area.

HOW DO COLORADO AND NATIONAL RESULTS COMPARE?



The most recent available national aggregated Chapter 1 achievement results are from the 1991-92 school year. Although there is a discrepancy in years, Colorado consistently has higher average NCE gain scores in reading, language arts and math in both basic and advanced skills than results for Chapter 1 students as a nation.

WHAT ARE SOME SUCCESSFUL PROJECTS?

Larimer 1 Poudre School District, Fort Collins, Chapter 1 Early Childhood Education Program

Early childhood education includes more than just the preschool years of a child's life and continues up to or includes grade three. Using this definition, the Fort Collins Chapter 1 Program can truly be called a Chapter 1 Early Childhood Education Program.

The Preschool Project is jointly funded by Chapter 1, Head Start, the Colorado Preschool Program, and Special Education. Children attend classes four days per week. On Fridays staff members conduct home visits, parent workshops, and other parent involvement activities.

The Kindergarten Early Literacy project provides literacy services to the most at-risk children with parental involvement as a chief focus.

The Reading Improvement Project centers on preventive reading services to low achieving children in the primary grades. A small number of the lowest achieving first grade children in each Chapter 1 school are given individual assistance using an accelerated reading model. Other instructional services are provided to eligible children in grades one through three in a combination pullout/in-class model. Children may spend 30-40 minutes in Chapter 1 pullout sessions three to five days per week. Other Chapter 1 time may be spent in-class using cooperative learning methods which were carefully researched during 1991-92 and continue to be refined each year.

A unique feature of this program is the "Reading with the Rams" project which began in 1992 with 24 athletes from Colorado State University (CSU), including the quarterback of the football team, reading with Chapter 1 students at four schools. Now athletes, both male and female, representing a variety of sports such as football, basketball, and track from CSU read with Chapter 1 children at all Chapter 1 schools. The athletes receive special training on how to work with children and have each contributed 60 hours of contact time with the

Chapter 1 children for which they receive two hours credit. The program was extended to families when the athletic department provided tickets to a basketball game and a football scrimmage. One parent commented, "Reading with the Rams has been very positive for my son. He has improved his skills and the Rams had a wonderful impact on him. He was so proud to be reading with them. We cannot thank you enough."

For more information contact: Yvonne Wittreich, Chapter 1 Director, (303) 490-3219.

Jefferson 1, Lakewood-Golden

Chapter 1 and Even Start Family Literacy programs in Jefferson County work closely together and receive mutual benefits.

Both programs have benefitted from training provided by Patricia Edwards, Michigan State University, and her *Parents as Partners in Reading* program. Through this and other training, Chapter 1 and Even Start staff have learned how to help instruct parents on reading to their children at home.

Jeffco makes good use of home liaisons, some of whom are jointly funded by both programs. With their training in modeling good home educational practices, these staff persons greatly benefit parent participation in their children's learning.

More recently, a new program that includes Chapter 1 and Even Start families has been developed. It is called HAPPENINGS-(Helping All Parents Parent Effectively and Naturally in Neighborhood Group Settings-Whew!). Eighteen families are invited to attend meetings at one of three sites. Each meeting includes dinner, an interactive parent workshop, activities for children, a parent/child together activity, and a follow-up activity to do at home. This flexible model starts with what families know and builds on that base, rather than following a prescribed course of instruction.

For more information, contact Norby Pratt, Chapter 1 and Even Start Director, (303) 273-7485.

Rio Blanco 1, Meeker, Chapter 1 Special Reading Program

The Chapter 1 Special Reading program in Meeker serves children in grades one through eight. Students work interactively with the teacher and each other in small groups and individually to improve and enrich their reading/language arts skills. Integration of reading and writing is encouraged so that not only basic reading and language skills are developed but higher level comprehension strategies and thinking skills as well.

A combination pullout/in-class delivery model is used with cooperative learning groups working and learning together in both the pullout and in-class designs. A vast array of literature, materials, methods and strategies conducive to improving students' reading and language ability and their interest and joy in reading is used. Additional reading incentive activities to encourage the promotion of leisure-time and at-home reading are incorporated in the Chapter 1 program and coordinated with the regular classroom.

Library skills are developed and enriched by a cooperative program with the Public Library. The librarian orients Chapter 1 students to the library to develop the habit of library use. Parents are also encouraged to use the library regularly. The library summer reading program is introduced to the children in the spring and they are provided with a booklist to encourage out-of-school reading.

Meeker Chapter 1 students are a part of the "Read-Aloud-Crowd," a project of the Colorado Council of the International Reading Association which encourages parents and children to read together. As "Read-Aloud Crowd" members, the Chapter 1 students read on a regular basis with and to senior citizens at the Walbridge Wing Senior Citizen Center and with preschool and kindergarten children.

For more information contact: Karen Benner, Superintendent and Chapter 1 Director, (303) 878-3701.

ACKNOWLEDGEMENTS

This report was prepared by Janice Rose Petro, Research Analyst of the Research and Evaluation Unit, Colorado Department of Education. In addition, Judith Burnes, Executive Director of Research and Evaluation; Virginia Plunkett, State Director of Chapter 1; and Betty Hinkle, Executive Director of the Office of Federal and State Program Services; are to be commended for their support and assistance in preparing this report. Appreciation is also extended to Iris Hogue, David Chandler and Roger Martinez, Chapter 1 consultants, for their cooperation and assistance, and to Martina Wamboldt of the Research and Evaluation Unit for preparing the manuscript.

Local project directors and their staff were extremely helpful in providing program information. Their time and dedication are appreciated.

This publication is 100 percent federally funded with Chapter 1 ESEA, CFDA #84.010 funds from an approximate project evaluation amount of $1,000.

COLORADO STATE BOARD OF EDUCATION

Sybil S. Downing, Chairman ..... Boulder
Member at Large

Patricia M. Hayes, Vice Chairman ..... Englewood
Sixth Congressional District

Gladys S. Eddy ..... Fort Collins
Fourth Congressional District

Royce D. Forsyth ..... Denver
First Congressional District

Thomas M. Howerton ..... Colorado Springs
Fifth Congressional District

Ed Lyell ..... Broomfield
Second Congressional District

Hazel F. Petrocco ..... Pueblo
Third Congressional District